| 3 | **INTRODUCTION** |

The Trouble Analysis Facilitation Interface (TAFI) system is a rules-based computer system providing automated trouble receipt and screening functionality. TAFI is a powerful application that guides its users through a series of questions and instructions to resolve or route Plain Old Telephone Service (POTS) customer service problems. These questions and instructions, called flows, trigger the gathering of the relevant data from the customer as well as from BellSouth's downstream applications/systems. TAFI processes the data to provide rapid, consistent, and efficient problem analysis and generates a recommendation for resolving the problem. Reports leaving TAFI fall into one of three categories, they are either:

(1) Resolved/Closed – the problem was isolated and repaired to the end-user's satisfaction. A trouble report was entered into the BellSouth OSS (LMOS) by TAFI and automatically closed.

(2) Routed to the appropriate entity for resolution – TAFI, through analysis of various legacy system data, determined the appropriate resource to resolve the problem. If TAFI doesn't have enough information to determine the correct repair path, it routes the report to a Maintenance Administrator (MA) for manual intervention.

(3) Canceled – the reported situation was not a BellSouth repair opportunity and the TAFI transaction was canceled. No record of the call was entered into LMOS.

A special version of TAFI has been developed for use by the Competitive Local Exchange Carriers (CLECs) to process their customers' POTS trouble reports. This CLEC TAFI system is identical to the BellSouth TAFI system in trouble processing functionality and presentation to the user. The only differences are:

⇒ The CLEC TAFI system knows who the user is and limits their access to only customer records that they are allowed to view.

⇒ The CLEC TAFI system process trouble reports for both Residence and Business class of service customers on the same processor. BellSouth users must log into different processors to accommodate the different class of service customers.

⇒ The Supervisor Function is limited to the given CLEC's user community.

> **Since the CLEC TAFI system, with the differences noted above, is identical to the BellSouth internal TAFI systems, the CLEC user has access to information that may or may not apply to how his company supports their customers.**

3.1   BACKGROUND

To better appreciate what TAFI does, let's take a minute to review the trouble resolution process before the introduction of this new system.

Customers reported their problems to the (old) Centralized Repair Service Attendants Bureau (CRSAB) at BellSouth where a Repair Service Attendant (RSA) input the customer's information into the LMOS system. The RSA then informed the customer that the problem would be resolved by the commitment date/time and that someone else would be contacting them.

The trouble report would then flow to the LMOS auto-screener (software package) to see if the system could determine where to send the report. This auto-screener had limited capabilities and could identify only obvious situations. (For example, if the MLT test indicated that the line was open and the customer was reporting No Dial Tone, the auto-screener package would route the report for a field technician to be dispatched.)

Reports that could not be handled by the auto-screener program were then routed to the screener position in the Installation Maintenance Center (IMC). The screener (an MA) accessed a number of downstream systems to manually analyze the situation and correct the problem (if it could be remotely repaired) or determined where the report needed to go for resolution.

This MA needed to (1) know which downstream system to use (i.e., there are many LMOS, Predictor, MARCH, etc. systems in BellSouth), (2) possess the experience to analyze the information gathered and (3) provide consistent resolutions and/or recommendations as to where to send the problem.

With the introduction of a system called StarRep (1992), the RSA was provided the capability to perform some very basic trouble resolution functions. The TAFI system was built on these early initiatives to become the system used today in BellSouth.

Customer Contact - pre TAFI
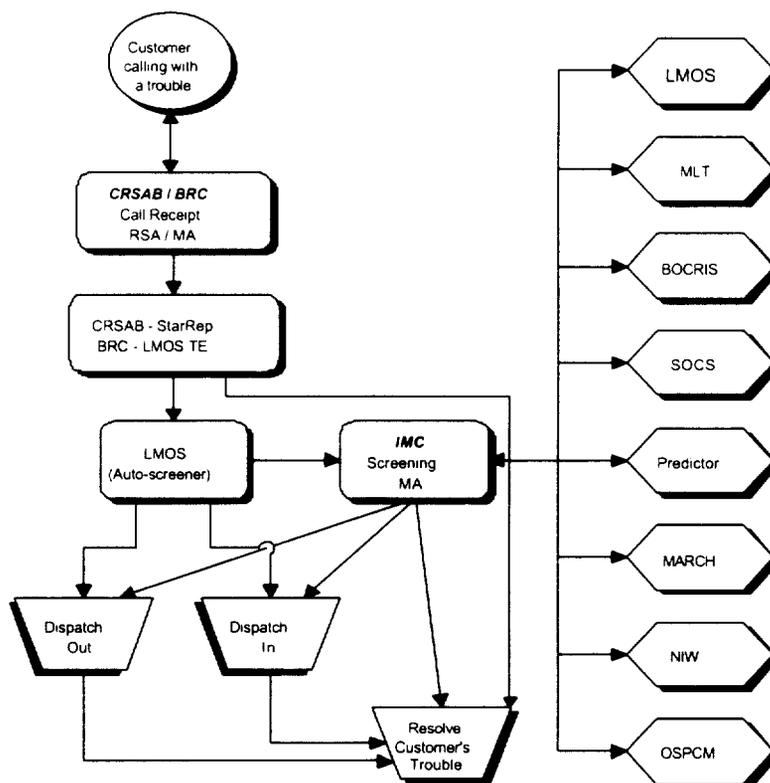
Figure 1 – Trouble Processing pre-TAFI

With the introduction of TAFI, the person handling the initial customer contact will resolve all POTS trouble conditions (for those troubles that can be cleared remotely) or route the trouble report to the correct entity for resolution. In other words, the functions performed by the MA in the IMC are now completed by the TAFI user on the initial contact.

This task was accomplished by developing a tool that performs the mechanics of accurately processing the customers' trouble situations. TAFI actually accesses all of the downstream systems, gathers appropriate data, performs specific Central Office translation changes and provides the user with a recommendation / resolution to the problem condition.

**Customer Contact - with TAFI**
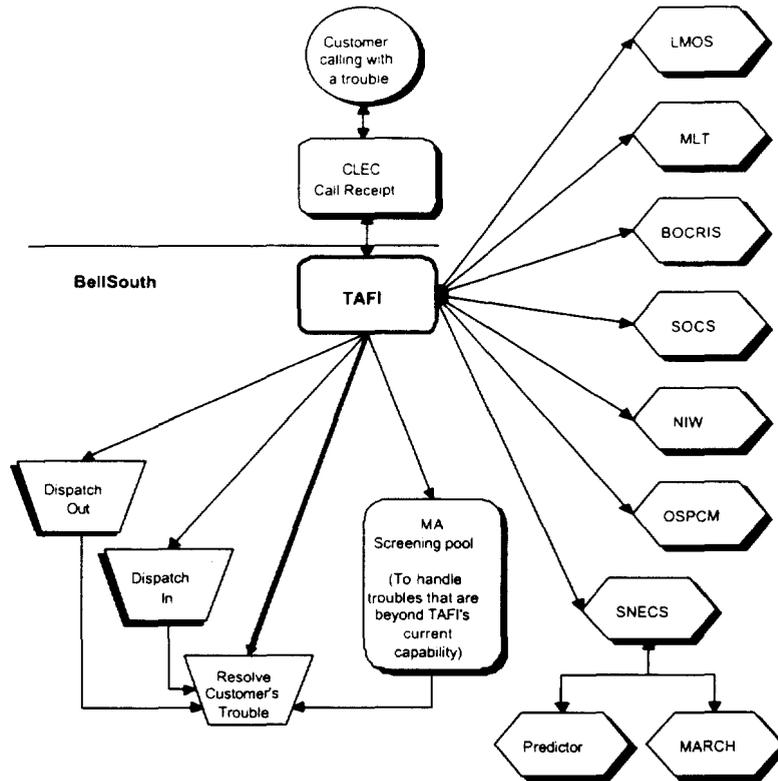
Figure 2 – Trouble Processing with TAFI

⇒ **Note:** TAFI is just an interface to many BellSouth systems. LMOS is the official trouble reporting system for non-designed services. When the user processes customer reports using TAFI, TAFI does all of the work of generating the appropriate LMOS entries.

3.2 LIMITATIONS

TAFI supports the trouble processing function for most of the telephone number based non-designed services (POTS) supported in the LMOS system. This includes resale, combined UNEs (port/loop combos) and most Centrex, ESSX and Prestige services

For the complex POTS offerings (i.e., Hunting) not yet supported in TAFI, the user can still use TAFI to input the trouble report, even though the screening and analysis function will not be available.

These reports are easily identifiable because TAFI does not provide an appropriate menu option. Proceed by populating all of the required fields and provide the customer with the repair commitment. Then the user will: (1) depress the Override key; (2) select the Technical Assistance option followed by (3) MA - needs further analysis. Be sure to provide detailed information about the trouble on the Narrative line.

3.2.1 SPECIFIC EXCLUSIONS

Although **ISDN** service provides two telephone numbers for its user, it is provisioned using a circuit ID. Therefor CLEC users wishing to report a problem on their customer's ISDN service must call the BRMC and report the problem manually.

Stand-alone UNE ports are assigned a telephone number but they are provisioned as designed services supported in WFA (Work Force Administration – the BST OSS for complex service management). Therefore the user can not process trouble reports on stand-alone UNE ports using CLEC TAFI.

SL1 UNE loops are non-designed services supported in LMOS. However, these are provisioned using circuit IDs and the CLEC TAFI system (today) does not process trouble reports using the circuit ID.

3.3 SUPPORT CONTACTS

Should you experience any difficulties accessing the CLEC TAFI system (either with your terminal connections, password difficulties, etc.) or have questions about how CLEC TAFI system is processing your report, your point of contact is **your Local CLEC TAFI Subject Matter Expert** (SME). BellSouth has trained this CLEC employee in the proper use of the CLEC TAFI system and in most cases will be the instructor for this course. This person is also familiar with your terminal configuration, software set up, etc. or can obtain a local resource to help you.

BellSouth has established a support structure to assist your SME in resolving problems. By funneling all questions through a single point of contact, the overall CLEC TAFI proficiency level at your company will grow quickly. The process for reporting CLEC TAFI system problems is provided in Section 0.

> **If you can not access the CLEC TAFI system for some reason you can still take the information about the trouble condition from your customer (using the form in Section 15.1) and then call the BRMC - BellSouth Resale Maintenance Center (888-461-0612) to report the trouble for your customer.**

For the following non-TAFI related trouble situations, please call the appropriate BellSouth center:

For assistance with Fast Packet (Frame Relay, CDS, NMLI, MultiPoint Video) and ATM, please contact the Digital Communications Service Center (DCSC) at **800-256-6923**.

For support with Unbundled Network Elements (UNEs), please contact either the Atlanta UNE Center at **800-795-0153** or the Birmingham UNE Center at **800-811-9079**. (Your account team will advise you which one to use.)

4   GENERAL APPLICATION FEATURES

Once logged into the CLEC TAFI system, the system will guide the user through the trouble entry and resolution process by:

- prompting the user to ask the customer for specific information,

- prompting the user to enter information in the appropriate fields

- gathering data from downstream systems

- performing analysis on the gathered data, and

- makes a recommendation to resolve the customer's problem.

4.1   A WORD ABOUT TAFI WINDOWS

The user should be familiar with the characteristics of traditional windows as seen in Microsoft Windows on a PC and on an X-Window LAN terminal. All of these windows include a title bar, the user can move them around the screen, the user can jump from one window to another, change their size, shrink them into icons, etc.

The term window has a different meaning in the TAFI application. TAFI was designed to be accessible from a number of different terminal types - everything from a sophisticated
X-Window terminal to a simple ASCII terminal like a VT220. Therefore, the TAFI application does not support a Graphical User Interface (GUI). In other words, once you log into TAFI and use your mouse to move the TAFI screen to where you like it to be *you will not use the mouse to use TAFI.*

In TAFI, the term window refers to a section of the screen, usually surrounded by a line, that contains information. These windows often overlap information presented previously and will have the look of traditional windows. *The user can tell which window is the active window by locating the TAFI cursor* (typically a red block the size of a character).

TAFI windows are divided into three types:

- The Main Menu

- Sub Menus

- Pop-Up Windows

The user can select an item from a menu by positioning the highlighted area (reverse video) over the selection and depressing the **Enter** Key. This positioning is done by using the cursor positioning arrow keys on your keyboard. When the user selects an item from the Main Menu, TAFI will display a Sub Menu of additional items. Selecting one of these items may generate another Sub Menu or start the flow of resolving the particular trouble situation.

The significance of the TAFI window architecture will become apparent as the user begins operating in the T. FI environment.

4.1.1 FUNCTION KEYS

The CLEC TAFI system utilizes twelve (12) function keys (F1 – F12) to execute specific tasks. The actual function that a given key performs often depends upon what TAFI window the user is working on. The *Function Key Map* on page 237 displays all of the possible functions available at a given CLEC TAFI window.

4.1.2 SCROLLING THROUGH A TAFI WINDOW

In some cases, all of the information in a window can not be displayed at the same time (the TAFI screen is fixed in size). When this happens, TAFI displays a row of v's at the bottom of the window to alert the user that there is more information below.

vvvvvvvvvvvvvvvvvvvvvvvvvvvvv

To access (see) this information you must scroll down the visible information to uncover the hidden information. In some cases this is done this by simply using the down arrow key to move the highlighted area to the bottom of the window and keep going to reveal more information. In other cases, the arrow keys do not work and the user has to use the function keys to move the highlighted selection bar - F3 to move it down and F2 to move it up.

In windows requiring the function keys to move the selection bar, the selection bar can move down past the bottom of the window and disappear. To see where it went, depress the PAGE DOWN key on your keyboard. This will display the next window full of information. When you page down on one of these windows, TAFI displays a row or up arrows to remind the user that there is additional information above where you are in the window.

∧∧∧∧∧∧∧∧∧∧∧∧∧∧∧∧∧∧∧∧∧∧∧∧∧∧∧

To return to the previous page of information, depress the PAGE UP key on the keyboard.

How can the user tell which technique to use, arrow keys or function keys? TAFI tells you. If, at the bottom of the pop-up window, TAFI says:

F2 up   F3 down   ENTER accept

then use the function keys. If TAFI doesn't provide this prompt, then use the arrow keys.

> **Just remember to look for the prompt at the bottom of a pop-up window and then take the appropriate action to move around the window.**

4.2   ACCESSING TAFI

The CLEC TAFI system supports two modes of communication with the user:

⇒ LAN to LAN communications using Telnet protocol

⇒ Dial in access using Telnet protocol

Each user has access to a production and a back-up CLEC TAFI system. The back-up system is configured exactly the same as the production system and is made available should problems occur with the production system.

The first step in accessing TAFI is to establish the connection path[1].

• For LAN to LAN users, log into the LAN server and double click the appropriate TAFI icon (i.e., TAFI Production).

• For DIALS users, activate the terminal emulation software, call the DIALS telephone number via the modem, and log into the Network Access Controller (NAC). Use your Common User ID for the login. The Passcode is a combination of your PIN code plus the six digits that appear on your SecurID card. Establish your connection to the Production CLEC TAFI processor by entering the correct IP Address in the Telnet connection window.

When the user is connected to the TAFI application, the following log on screen is presented:

---

[1] The CLEC's systems administrator will provide site specific instructions.
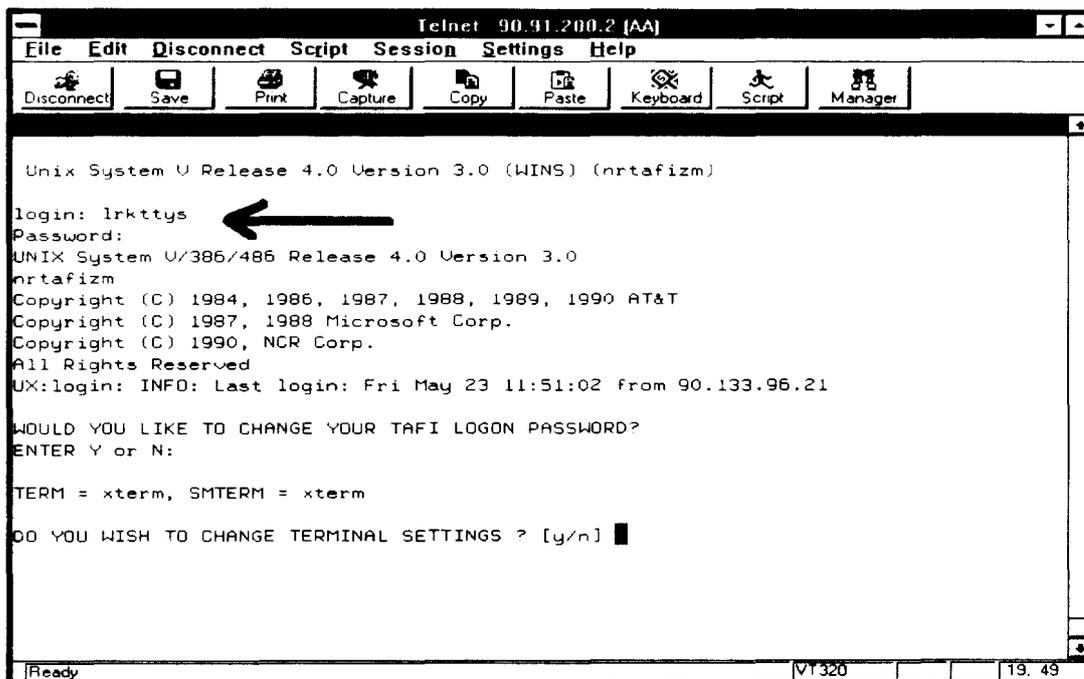
Figure 3 – Log-on Screen

The Login: is the user's Common User ID (CUID), often referred to as the **User ID.** It is typically a seven-character string that uniquely identifies the user to the computer system (i.e., "lrkttys" shown above). The user's personal password tells the system that you are who you claim to be and allows you access to the application. You must type your **User ID** and **Password** (*using lower case*) in the fields provided and then press the **Enter** key.

⇒ **Note:** When entering the password, the system does NOT display what was typed. This is a security measure to prevent others, who may be watching you, from learning your password. Passwords are private and should never be shared with anyone.

⇒ **Note:** If you enter an incorrect value and backspace to correct it before depressing the Enter Key, CLEC TAFI will fail the attempt. The User ID and Password must be entered correctly the first time. The CLEC TAFI system will allow three attempts and, failing all three, the user will be disconnected and the User

ID suspended. Should this happen to you, contact your local SME and have them contact BellSouth for restoration

Once the user successfully enters their UserID and Password, the system automatically places the user into the CLEC TAFI application.

⇒ **Note:** As part of TAFI's flexibility, the system wants to know what kind of terminal is being used. The system asks: *"Do you wish to change terminal settings Y/N?"* The system default terminal is a VT220 and the user's terminal matches this profile. When this question appears, depress the Enter key to accept the default value of NO.

⇒ **Note:** The system also provides the opportunity for the user to change their TAFI password. Depress Enter to accept the default answer of NO (unless you want to change your password).

4.2.1 **NOTES ON PASSWORDS**

Logging on to any BellSouth computer systems requires the use of a User ID and Password for security reasons. They prevent unauthorized persons from accessing confidential records. To ensure security, the user is required to manage their personal passwords. You will choose your password and keep it private.

Your CLEC TAFI password must contain seven characters. They must be alpha numeric and have at least two numeric or special character (&, $, #, etc.). Instead of randomly selecting numbers, letters, and special characters (that you will need to memorize), it is better to devise a scheme. For example, family names, pets' names, friends' names, etc. You can be very creative and choose a sequence, such as, ages, when you got the pet, when you met a special person, etc. In the name, change the letters that look like numbers and characters, e.g., 5 for S or $ for S, ! for I or 1 for i, etc.

CLEC TAFI passwords age (expire) in 45 days. When your password is about to expire, CLEC TAFI will provide you with a warning message several days in advance. If you let your CLEC TAFI password expire, the system will allow you one opportunity to log in with the old password and will then guide you through the process of changing it.

⇒ **Note:** Each time you log into a CLEC TAFI system, the system gives you the opportunity to change your password. The prudent user will set up a schedule to pro-actively change their passwords on a monthly schedule (i.e., pick the day of each month that corresponds to you birthday date).

BellSouth provides each CLEC with access to two CLEC TAFI processors: (1) a Production processor for normal day-to-day activity and (2) the Back-Up processor for use when the production system is not available.[2] These systems are configured in such a way that the user login information is copied every evening from the Back-Up system to the appropriate Production systems.

> **When changing your CLEC TAFI password, you must change it on the Back-Up system (IP address = 97.10.1.77 from the DIALS Telnet window)[3] as well. Failure to do so will cause your production system password to change back to its old value (the one active on the Back-Up system) the day after you changed it.**

4.2.2 FIRST TIME LOGIN

The first time you log into the CLEC TAFI system with your assigned UserID and Password, CLEC TAFI will force you to change your password. The system will tell you that your old password has expired and to reenter that old (initial) value. Then you will be prompted to enter a new password twice. Your new password is good for 45 days (before the CLEC TAFI system forces you to change it).

Every time you log into the system, TAFI will give you the opportunity to change your password. The default answer to the change password question is no and all you do is depress the **Enter** key.

4.2.3 USER MANAGEMENT

Individual users change over time. They move to new assignments, leave the company, etc. When a given user no longer needs access to the CLEC TAFI system, the CLEC's SME should notify his BellSouth account team to have the user removed from the system. Unfortunately this process does not always work as well as it should. Therefore, the CLEC TAFI system (as well as all internal BST TAFI systems) has implemented an automated user clean-up routine.

⇒ **Note:** If a given user has not logged into the CLEC TAFI system for a period of 60 days, the system will assume that the user no longer needs access to the system and will automatically delete the user from the system.

---

[2] For example, the production processor may be down for weekly backups (typically on Saturday night between the hours of 11 PM and 2 AM) or there may be some connectivity problems to the production system.

[3] For LAN-LAN users, click on the TAFI Back-Up icon

If the given user has been deleted but access to the CLEC TAFI system is still required (i.e., the user was on an extended absents, etc.), they can be reestablished by contacting your BellSouth account team.

4.2.4   USER VALIDATION

As mentioned in the Introduction (page 16) the CLEC TAFI system knows who the user is and allows the user to view data and process trouble reports only on lines that the user is allowed to access. The process of validating the user occurs on every trouble report entered as follows:

> **Every time the CLEC user enters a trouble report, TAFI validates that the number entered belongs to the CLEC. This validation process has multiple steps to insure accuracy:**
>
> 1. **If there is a pending[4] Service Order (SO) due today or past due, TAFI looks for an OCN[5] value in the Bill section (i.e., part of the MAN or RESH number).**
> 2. **If the SO is future dated (or no SO exists for the entered telephone number), TAFI looks for an OCN value in the CRIS record.**
> 3. **If CRIS is not available (i.e., down time at night), TAFI uses the OCN value found on the LMOS DLR report.**
> 4. **If all sources for the OCN value are not available[6], the validation can not be made and the CLEC user can either (a) report the customer's trouble manually to the BRMC or (b) wait until access to the legacy systems becomes available.**
> 5. **If an OCN value is found, TAFI compares this value against the list OCN values stored in TAFI that the particular user is allowed to view. If a match is found, the CLEC user has full access to process the report. If a match is not found, TAFI will generate an error message (see Section 11) for five seconds (informing the user that the account belongs to another company) and will then return the user to the Initial Trouble Entry Window.**

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[4] A pending service order with the potential of closing on the due date. For example, orders with a status of CP or PCX will determine CLEC ownership. Orders in a jeopardy status (any _AO, PF, etc.) will not.

[5] OCN is the Operating Company Number assigned to the local competition carrier during the certification process of becoming a CLEC.

[6] The legacy systems are down for daily back-up for approximately one hour between the hours of 1 AM and 4 AM and a multi hour maintenance window on the weekend during the same time frame.

4.3   WHEN TO ACCESS THE BACK-UP SYSTEM

As stated earlier, each CLEC user has access to two CLEC TAFI processors; (1) a Production system for normal day-to-day operation and (2) the Back-Up system for use when access to the production system is not available.

During normal operation, the CLEC TAFI application on the Back-Up system will be disabled. Users are able to log in and manage their TAFI password but will receive an error message stating:

"... UNABLE TO START NEW USER AT THIS TIME"

This procedure was initiated to ensure all activity takes place on the production systems.

CLEC users should follow the procedures provided in Section 0 for managing their system access problems. Since a given user can experience several different types of problems, the local SME is best suited to coordinate and resolve the problem.

Should a failure condition exist on a production CLEC TAFI system, the BellSouth SPOC will activate the TAFI application on the Back-Up processor. Therefore, if you can not access your designated production system[7], and you can access the CLEC TAFI application on the Back-Up processor, then you know that BellSouth is aware of the trouble and is actively working to correct it.

If you can not access the CLEC TAFI application on either the Production or Back-Up system, your SME must report the problem to the BellSouth SPOC for immediate action.

Until you have access to a CLEC TAFI system, you will follow the emergency procedures developed by your company (i.e., manually report your customer trouble reports to the BellSouth Resale Maintenance Center or take paper tickets and process them when access to TAFI is restored, etc.).

When the problem with the production system is corrected, a broadcast message will be sent to all active users on the Back-Up system. This message will also announce that the Back-Up system will be turned off in some period of time (i.e., 15 minutes) thus giving users time to finish their existing activity and move to the production system for ongoing work.

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[7]   When you connect to TAFI via the Telnet window and you get the message "**trying**" and do not connect, **DO NOT CONTINUE** repeating the attempts. Continuing the process could only aggravate a communications problem. Have your SME report the condition and then access the Back-Up system to process your customer's reports.

5	**GETTING STARTED**

To begin using the CLEC TAFI system, the user will follow his local procedures and access the CLEC TAFI login window as shown in Figure 3.

5.1 LOG-ON TO THE CLEC TAFI SYSTEM

After entering the User ID and Password, the user will be logged into the CLEC TAFI system. The following screen will be presented and the reader's attention should focus on the Initial Trouble Entry Window:

```
06 12 00 Trouble Analysis Facilitation Interface  CRTAFI2M   BST 00.3 SIMI

TN  ██ ██ ████████████████  NAME ████████████████
                    OOS █  ADDRESS ████████████████


              ┌──────────────────────────────────────────┐
              │  TN ██ ██ ████████████████               │
   │DIAL  │   │                                           │
   │OUTGOI│   │  Queue Management? █                      │
   │INCOMI│   │                                           │
   │TRANSM│   │  ▓profile   ▓queued   ▓supervise  ▓exit   │
   │MEMORY│   │                                           │
   │MEMORY│   │  ********************************************** │
   │CALLIN│   │  *  May contain fragmented CPNI, to be used only * │
   │LONG D│   │  *  consistent with your CPNI training. Not to   * │
   │PHYSIC│   │  *  be used for sales and marketing purposes.    * │
   │DATA P│   │  ********************************************** │
   │ENHANCED SERVICES          │
   │NEW FLOW 1                 │
   │NEW FLOW 2                 │
              └──────────────────────────────────────────┘

No troubles in queue                                      11:15:04
```

Figure 4 – Initial Trouble entry Window

As mentioned earlier, the term windows in the CLEC TAFI system represent areas of the screen, typically surrounded by a line, that contains specific information needed to resolve a customer's trouble and/or enter a quality trouble report in LMOS. The Initial Trouble Entry Window is that section in the center of the screen that provides the initial questions required to initiate a trouble report.

Every time the user completes a trouble report, the CLEC TAFI system will return to this Initial Trouble Entry Window to begin processing the next customer report or allows the user to log off.

5.2   LOGGING OFF TAFI

To log off (exit) the CLEC TAFI system, the user must depress the F6 function key *while at the Initial Trouble Entry Window*. (Obviously, the CLEC TAFI system will not allow a user to log off in the middle of processing a customer's trouble report.)

⇒ **Note:** Some of the function keys in the TAFI application can take on different characteristics depending upon which TAFI window is active. The best advice is to look at the bottom of a given window and take note of the functions performed by the F keys. For example, at the Initial Trouble Entry Window, F3 displays the status of the user's queue while in a look-up window F3 moves the selection bar down a position.

Depressing the F6 function key produces the following Message Window asking the user to confirm that exiting the system is the requested function:
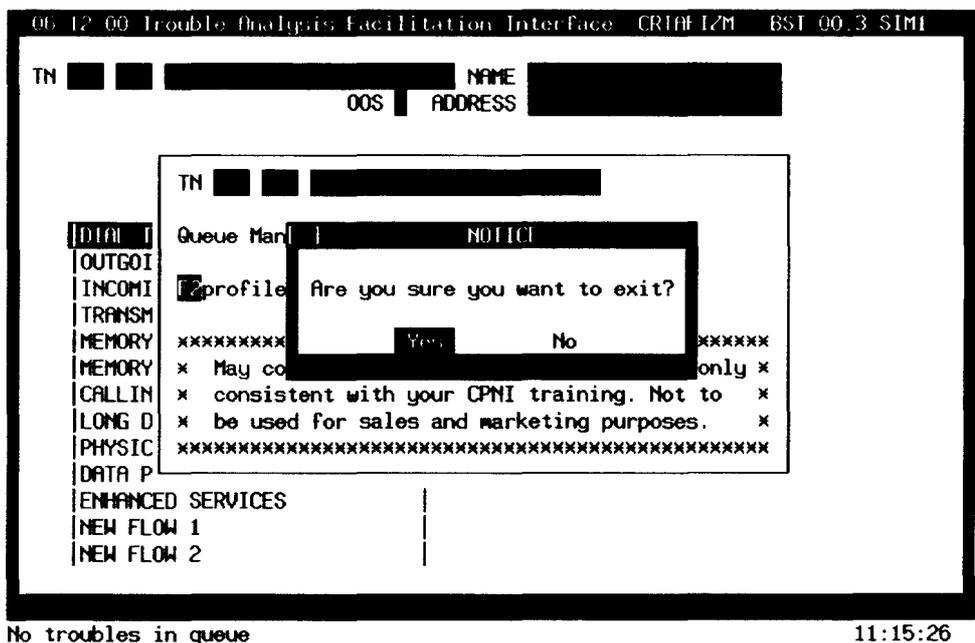

Figure 5 – Log-Off Screen

Depressing the **Enter** key (to accept the default value of Yes) causes the CLEC TAFI system to log the user off and disconnects the connection. The LAN to LAN user will be returned to their desktop. The DIALS user will be returned to a blank Telnet screen. (Follow your company's procedure to gracefully drop the telephone connection.)

5.3 THE TAFI SCREEN

Once logged back into the CLEC TAFI system, the user will see the initial screen as shown below:

```
 06-12-00 Trouble Analysis Facilitation Interface  CRTAFIZM   BST 00.3 SIM1

 TN  ██ ██ ████████████████         NAME
                          OOS   ADDRESS   ██████████████

        ┌────────────────────────────────────────────────┐
        │ TN  ██ ██ ████████████████                       │
  ┌─────┤                                                  │
  │DIAL │ Queue Management?  █                             │
  │OUTGOI                                                  │
  │INCOMI│  profile    queued    supervise    exit         │
  │TRANSM│                                                  │
  │MEMORY│ xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx   │
  │MEMORY│ x  May contain fragmented CPNI, to be used only x│
  │CALLIN│ x  consistent with your CPNI training. Not to  x │
  │LONG D│ x  be used for sales and marketing purposes.   x │
  │PHYSIC│ xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx   │
  │DATA P└────────────────────────────────────────────────┘
  │ENHANCED SERVICES              │
  │NEW FLOW 1                     │
  │NEW FLOW 2                     │

 No troubles in queue                                      11:15:04
```

Figure 6 – CLEC TAFI Initial Screen

5.3.1 BASIC SCREEN LAYOUT

Take a moment to look at the TAFI screen and learn a little more about how it's laid out.

5.3.1.1 TITLE BAR

Across the top of every TAFI screen is the **Title Bar**. It verifies that you are using the TAFI application - because in the middle of this title bar is the application name:

Trouble Analysis Facilitation Interface

At the left side of the title bar is today's date (i.e., 06-12-00) and the current software level is identified on the right side of the title bar. The current software level (at this writing) is:

- BST (indicating that BellSouth owns and maintains this product)

- 00.3 (indicates that this is the third major release in the year 2000 – minor releases would be displayed as 00.3.1 and/or 00.3.1.1)

- SIM (indicates that you are using the training or Simulated database)

To the left of the software level information is an indicator which identifies which CLEC TAFI processor is being accessed (i.e., CRTAFIYZ is the CLEC TAFI production system located in the Charlotte data center). This assists the support personnel in identifying which physical machine was being used when system problems are reported.

5.3.1.2 **STATUS LINE**

The Status Line is located at the very bottom of the CLEC TAFI screen (under the border) and provides information about what the CLEC TAFI system is doing. At the extreme right side of this line is a clock display. This clock shows you what time it is at the CLEC TAFI processor location.

> ⇒ **Note:** The CLEC TAFI production system is located in Charlotte, NC and the clock displays Eastern Time while the back-up system is located in Birmingham and that clock displays Central Time.

To the left of the clock TAFI displays a report timer that starts once the information on the Initial Trouble Entry Window is entered. It displays the number of minutes and seconds since the report was initiated. The intent of this timer is to provide feedback as to how long the user has been actively working on a given report.

The left side of the Status line provides you with information about what the CLEC TAFI system is doing. Think of these status messages as CLEC TAFI talking to you, telling you what it's doing and any problems (i.e., error messages encountered with downstream systems) that were encountered. If the user makes an error, TAFI will let the user know about it in this status message area. For example, if you forget to enter a value in a required field, CLEC TAFI will not let you proceed until that field is satisfied. CLEC TAFI will move the cursor to the required field and politely tell you (in this status line area) *"Field must be entered"*.

5.3.1.3 **ACTIVE WINDOW**

The term windows in the CLEC TAFI system refers to areas of the screen, usually surrounded by a line, that displays or requests information. These windows may overlap other information on the screen. You can tell which TAFI window is the active window by locating the TAFI cursor (typically a red square the size of a character).

In Figure 6, the Active Window (i.e., the Initial Trouble Entry Window) is the box outlined in the middle of the CLEC TAFI Screen containing TN (Telephone Number) and Queue Management. Notice the Active Window is presented over other information that's on the screen – specifically the Customer Information Window and the Main Menu.

5.3.2 INITIAL TROUBLE ENTRY WINDOW

The Initial Trouble Entry window is displayed when:

- The user initially logs on to the CLEC TAFI system

- The user finishes processing a trouble report (and TAFI is ready for the next report)

- The current trouble report is placed in the TAFI trouble processing queue

Let's take a closer look at the Initial Trouble Entry Window.

```
TN  ██ ██ ████████████████

Queue Management? █

█▓profile   █▓queued   █▓supervise   █▓exit

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
X   May contain fragmented CPNI, to be used only X
X   consistent with your CPNI training. Not to   X
X   be used for sales and marketing purposes.    X
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

The first thing the user will notice is the warning message regarding Customer Proprietary Network Information (CPNI). Since the CLEC TAFI system allows the user to view certain items on the customer's record, the user has access to CPNI data. BellSouth can not control how the CLEC user applies this information. However, BellSouth does put up this warning message as a reminder. (This message appears on all internal TAFI systems as well.)

Only one item of information is required to start the trouble processing activity:

- The Telephone Number (TN) of the line in trouble.

This TN field is provided in three sections: (1) three characters for the NPA (or Area Code), (2) three characters for the NXX (or office code) and (3) XXXX field for the actual number. The last section of the TN field has been expanded to 24 alphanumeric characters to accommodate PBX Terminal or DID numbers (i.e., 999 555 1234TER00001).

The Queue Management option is located on the Initial Trouble Entry window. The default value for this field in NO (N) when not populated by the user. In the normal course of processing a trouble report, the user only populates the TN field and then depresses the **Enter** key. To populate the Queue Management field, the user must use the Down Arrow key after entering the telephone number.

What is Queue Management? In large maintenance centers (high volume of trouble reports) a supervisor monitoring the queue activity (Section 13.1) may notice that a large number of reports are in queue. He will typically designate an individual to stop taking customer calls and provides them with a list of queued reports to work on. Since these queued reports were generated by many different users, TAFI will generate a subsequent report in LMOS when someone else (i.e., the user processing queued reports) provides information. The Queue Management option was introduced to avoid generating an unnecessary subsequent report. In other words, when a user is processing reports queued by someone else, he/she will down arrow to the Queue Management option and enter Y. TAFI will then treat the report as if the original user processed the queued report and not generate the LMOS subsequent report.

> A user **processing their own queued reports** (Section 8) would **not** use this Queue Management option.

Along the bottom of the Initial Trouble Entry Window the user will notice prompts indicating which function a given function key will perform.

5.3.2.1 **F2 PROFILE**

BellSouth maintains all CLEC profiles and this function is not available to the CLEC user.

5.3.2.2 **F3 QUEUED**

During the process of handling customer troubles the user may periodically put a report in queue (so TAFI can continue to work on the trouble while the user talks to another customer). To view the status of these queued reports, depress the F3 key while you are at the Initial Trouble Entry Window.

5.3.2.3 **F4 SUPERVISE**

This function key allows CLEC users with the supervisor authority to access the user queue management function (see Section 13).

5.3.2.4 **F6 EXIT**

From this window, depressing F6 will terminate the CLEC TAFI session.

5.3.2.5 **ENTERING THE DATA**

Once the TN field is populated, (and the user is not processing Queue Management reports) the user depresses the **Enter** key to begin the process. Based upon the telephone number entered, TAFI knows which:

- LMOS system to access to retrieve the customer's name and address information (along with many other pieces of information). There are three different LMOS systems in BellSouth each with multiple Front-End processors.

- Which CRIS database to access to retrieve the customer's CSR.

- Which Predictor system to use should line translations need verification. There are sixteen Predictor systems.

- Which MARCH system to use should reprogramming the switch be required to repair the customer's features problem. There are four MARCH systems.

Make sure the information is correct on the Initial Trouble Entry Window before depressing the Enter Key. Once the user depresses the Enter Key, a TAFI report is generated. If the user determines that an input error was made, they will have to cancel this report (see Section 10.1) and initiate a new one. (The user can not depress F6 and backup to the Initial Trouble Entry Window).

5.4 **TROUBLE ENTRY SCREEN**

Upon receipt of a customer call, the user will obtain and enter the area code and telephone number of the line in trouble and then depress the **Enter** Key. The Trouble Entry screen is ultimately displayed (see Figure 9 on page 40).

Based on the telephone number entered, the CLEC TAFI system gathers and displays the following information from the downstream or legacy systems:

- The customer's Name and Address from LMOS

- Line Features from the CRIS Customer Service Records (CSR)

⇒ **Note:** TAFI also obtains the customer's name and address from the CRIS CSR. However, the name and address found on the LMOS record is displayed on the TAFI screen and is used to generate the trouble report. In almost all cases the name and address values are the same. However, in some cases, the LMOS record may have incorrect data and you must then enter the correct values in the Narrative field of the trouble report (see Section 5.4.1). This ensures that the field technician is dispatched to the correct location (if a dispatch is necessary to correct the problem).

For illustration, a trouble report for 999-949-5038 is entered as follows:
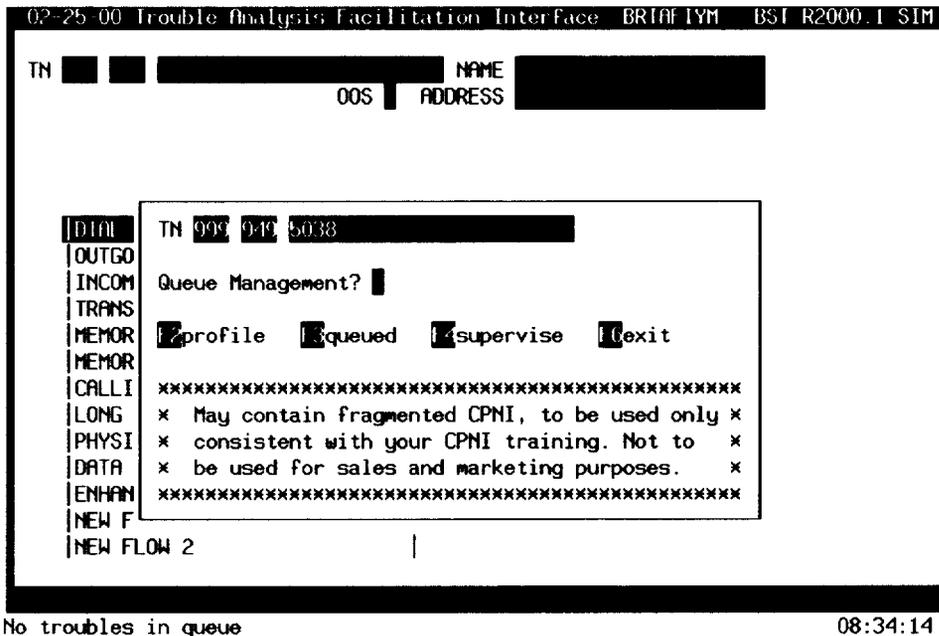
Figure 7 – Initial Report for 999-949-5038 Example

Depressing the Enter key results in the following:

```
02-25-00 Trouble Analysis Facilitation Interface  BRTAF IYM   BST R2000.1 SIM

TN 999 949 5038                          NAME DUNCAN, JACK M
                            OOS   ADDRESS 867 RENEF DR , HAUGH
                                         WAITING FOR BOCRIS
                                         WKG  RES   MAINT CONTRACT IN (LMOS)
     TDG                                 2071 DAYS SINCE LAST TROUBLE
                                         MCAL  FRAME

Analyzing DownStream Systems










LMOS Data Available for 9999495038                    00:02 08:38:25
```
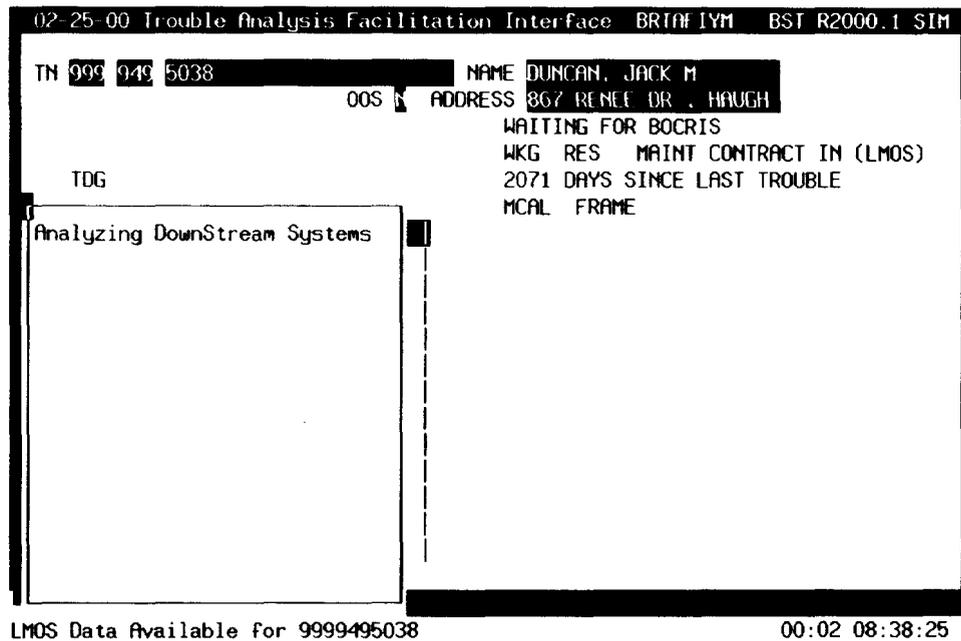
Figure 8 – Processing a Report

TAFI gathers data from LMOS and BOCRIS (CRIS) in order to process a customer trouble report. Once the user enters the initial information on the Initial Trouble Entry Window, TAFI forces the user to wait until the downstream data is collected. The message *Analyzing DownStream Systems* is displayed.

Notice that the message in the Status Line tells you that the LMOS data has been collected and the message under the Name and Address fields tells you that TAFI is still waiting for BOCRIS information.

⇒ **Note:** Earlier versions of TAFI obtained the customer's feature data (CSR) by logging into BOCRIS. TAFI now gathers this data directly from CRIS using a new communications technique called Navigator. However, the screen messages (i.e., *"waiting for BOCRIS"*) did not change.

⇒ **Note:** The current message in the Status Line will remain on the screen until the next Status Line message appears. Sometimes this is only a few seconds.

Once TAFI has collected data from the downstream systems, the following screen is provided:

```
02 25 00 Trouble Analysis Facilitation Interface  BRIAF IYM   BST R2000.1 SIM
┌─────────────────────────────────────────────────────────────────────────┐
│ TN 999 949 5038                    NAME DUNCAN, JACK M         1AES        │
│                         OOS     ADDRESS 867 RENEE DR , HAUGH               │
│                                                                           │
│                                  WKG  RES   MAINT CONTRACT TDG             │
│          TDG                     2071 DAYS SINCE LAST TROUBLE              │
│                                  MCAL B-9995559141 FRAME 999-555-4948      │
│          ┌──────────────────────┐                                         │
│          │ DIAL TONE            │                                         │
│          │ OUTGOING CALL        │                                         │
│          │ INCOMING CALL        │                                         │
│          │ TRANSMISSION         │                                         │
│          │ MEMORY SERVICE       │                                         │
│          │ MEMORYCALL           │                                         │
│          │ CALLING PLANS/BILLING (ANI) │                                  │
│          │ LONG DISTANCE        │                                         │
│          │ PHYSICAL             │                                         │
│          │ DATA PROBLEMS        │                                         │
│          │ ENHANCED SERVICES    │                                         │
│          │ NEW FLOW 1           │                                         │
│          │ NEW FLOW 2           │                                         │
│          └──────────────────────┘                                         │
└─────────────────────────────────────────────────────────────────────────┘
BOCRIS Data Available for 9999495038                      05:09 08:43:32
```

Figure 9 – Trouble Entry Screen

The Trouble Entry screen is used to initiate the report processing flows.

The Trouble Entry screen consists of the following:

Customer Information Window

Base Window Area

Query and Message Window

Sub-Menu Windows

Pop-Up Window Area

5.4.1 CUSTOMER INFORMATION WINDOW

The fields in this window are populated with information from LMOS about the customer's account. TAFI uses the telephone number you entered in the Initial Trouble Entry window to retrieve the following customer information:

- Name

- Address

- Maintenance agreement indicator

- New installation flag

The first section of the Customer Information Window identifies your customer's line record. This information is automatically provided by LMOS.

- **TN:** The area code and telephone number of the line in trouble is displayed here.

- **OOS:** Out Of Service indicator flag (Y/N)

- **Name:** The customer's name as listed in the LMOS database

- **Address:** The street address where the service is located (according to LMOS)

The next block of information contains information about the service. It is located under the Name and Address block.

- The Working Condition (e.g., WKG).

    This field describes the status of the line. Valid status indicators include WKG, UNAS, DISC and NWKG these values are described below:

    WKG (Working) - Calls can be made or received from this number.

    UNAS (Unassigned) - The telephone number is not yet assigned to a customer.

    ⇒ **Note:** It is possible that new telephone service information is not available yet in LMOS. The TAFI screen would show *Not Found* in the name and address field. The user will need to obtain the customer's name and address and enter it in the Narrative field of the TAFI Trouble Report screen. Precede the information with the relevant field indicator (e.g., LN _____ (for Listed Name) and SA ____ (for Serving Address).

DISC (Disconnected) - Calls cannot be made or received from this number.

⇒ **Note:** It is possible that new telephone service has recently been installed and the computer records are in the process of being updated. The user will need to obtain the customer's name and address and enter it in the Narrative field of the TAFI Trouble Report screen. Precede the information with the relevant field indicator (e.g., LN _____ (for Listed Name) and SA ____ (for Serving Address).

NWKG (Non-working) - Calls cannot be received or made from this number. Line is temporarily not working either at the customer's request or because of an overdue bill.

⇒ **Note:** Do Not discuss NWKG with the customer. Follow the procedures established by your company for this condition.

- The Class of Service (e.g., RES)

  Identifies the Class of Service (COS), e.g., RES (Residence), BUS (Business), COIN, DATA, CNTX (Centrex), etc.

- Maintenance Plan – this field identifies which BellSouth maintenance plan (if any) that the customer subscribes to.

- Reseller indicator – identifies if the account is owned by a CLEC.

  ⇒ **Note:** When TAFI is used by a BellSouth repair attendant, TAFI automatically recognizes that a reseller is involved with the account and notifies the user so appropriate actions can be taken.

The next line is used to display **Trouble History** (summary) information. If the customer has reported trouble in the last 30 days, it will be noted here as a **REPEAT Report** or you may see **NO TROUBLE HISTORY.**

The last line of the Customer Information Window displays begins with MCAL (for MemoryCall) followed by an O (for Octel) or B (for BTI) to indicate which MemoryCall system is provided in the serving central office followed by the **MemoryCall Access Number.** Should the TAFI flow indicate that you should contact the frame and have a technician perform a specific function, the **Frame Telephone Number** for the central office is also provided.